

Appl. No. 10/808,626
Reply to OA of 9/28/05

Amendments to the Claims:

Please amend the claims as shown in the Listing of Claims below. This Listing of Claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) An image formation apparatus for forming images on sheets fed at a sheet feeding interval from a sheet supplying device ~~positioned relative~~ detachably mountable to the image formation apparatus, said image formation apparatus comprising:

a sheet transporting unit transporting said sheets fed from said sheet supplying device;

an image formation unit forming images on said sheets ~~transported by said sheet transporting unit~~ a transfer member; and

a transfer unit transferring the image on the transfer member onto the sheet; and

~~a receiving unit receiving information on said sheet feeding interval from said sheet supplying device;~~

a control unit setting a sheet transporting interval in the sheet transporting unit based on sheet interval information according to an amount of sheets in the sheet feeding unit,

~~wherein said sheet transporting unit, responsive to said information on said sheet feeding interval, transports said sheets at said sheet feeding interval~~

wherein the control unit sets an image forming interval on the transfer member according to the sheet interval information.

2. (Currently Amended) An image formation apparatus according to Claim 1, wherein the sheet interval information ~~on the sheet feeding interval~~ includes information on number of sheets remaining in the sheet supplying device.

3. (Currently Amended) An image formation apparatus according to Claim 2, wherein in a case where the number of sheets remaining in the sheet supplying device is greater than a

Appl. No. 10/808,626
Reply to OA of 9/28/05

predetermined number of sheets, the receiving control unit receives information on a first sheet feeding interval, and the sheet transporting unit transports the sheets at said first sheet feeding interval; and

wherein in a case where the number of sheets remaining in said sheet supplying device is less than or equal to said predetermined number of sheets, the receiving control unit receives information on a second sheet feeding interval longer than said first sheet feeding interval, and the transporting unit transports said sheets at said second sheet feeding interval.

4. (Currently Amended) An image formation apparatus according to Claim 3,

wherein the image formation unit ~~comprises~~ includes a plurality of image-carrying members, each image-carrying member carrying one color of a plurality of color toner images[[:]],

wherein the transfer member includes an intermediate transfer member facilitating primary image transfer by contacting said plurality of image-carrying members for transferring said plurality of color toner images onto said intermediate transfer member[[:]],

[[a]] wherein the transfer unit facilitating facilitates secondary image transfer by transferring said plurality of color toner images from said intermediate transfer member onto a sheet[[:]], and

wherein said ~~image formation control~~ unit receives information on whether a sheet remains in said sheet supplying device, in a case where the receiving control unit receives the information on the second sheet feeding interval, and responsive to said information on whether the sheet remains, initiates primary image transfer onto the intermediate transfer member.

5. (Currently Amended) An image formation apparatus according to Claim 1, further comprising:

a determining unit determining [[the]] a position of the sheet supplying device relative detachably mounted to said image formation apparatus; and

Appl. No. 10/808,626
Reply to OA of 9/28/05

a transmission unit transmitting a signal to notify information on the ~~sheet feeding interval to the sheet supplying device~~ amount of sheets in the event that said determining unit has determined that the position of said sheet feeding device is a predetermined connection position.

6. (Currently Amended) An image formation apparatus according to Claim 5, wherein the determining unit determines a detachable mounting position of the sheet supplying device to said image formation apparatus, and wherein the transmission unit transmits the ~~information on the sheet feeding interval~~ signal to said sheet supplying device in the event that said determining unit determined that the position of said sheet feeding device is the predetermined connection position.

7. (Currently Amended) An image formation method for an image formation apparatus ~~and for forming images on sheets fed from a sheet supplying device positioned relative thereto and feeding sheets detachably mountable to said image formation apparatus at a sheet feeding interval~~, said method comprising the steps of:

a querying step of querying said sheet supplying device for a sheet interval information regarding said sheet feeding interval according to an amount of the sheets in the sheet feeding device;

a receiving step of receiving said sheet interval information regarding said sheet feeding interval from said sheet supplying device in response to said querying step;

a transporting step of transporting the sheets fed from said sheet supplying device [[at]] according to the sheet feeding interval information received in said receiving step; [[and]]

~~forming an image on the sheets transported in said transporting step~~

a setting step of setting an image forming interval on a transfer member based on the sheet interval information received in said receiving step; and

a transferring step of transferring images on the transfer member onto the sheets transported in said transporting step.

Appl. No. 10/808,626
Reply to OA of 9/28/05

8. (Currently Amended) An image formation method according to Claim 7, wherein the sheet interval information ~~regarding said sheet feeding interval~~ includes information on ~~remaining~~ number of sheets loaded on said sheet supplying device.

9. (Currently Amended) An image formation method according to Claim 8, wherein the ~~step of receiving step said information regarding said sheet feeding interval~~ includes a step of receiving information regarding a first sheet feeding interval in a case where the remaining number of sheets loaded on said sheet supplying device is greater than a predetermined number of sheets, and a step of receiving information regarding ~~[[to]]~~ a second sheet feeding interval longer than said first sheet feeding interval in a case where the ~~remaining~~ number of sheets loaded on said sheet supplying device is less than or equal to said predetermined number of sheets; and

wherein the ~~step of transporting step said sheets fed from said sheet supplying device~~ further includes transporting said sheets at said first or second sheet feeding intervals responsive to receiving said information regarding the first or second sheet feeding intervals, respectively.

10. (Currently Amended) An image formation method according to Claim 9, wherein the ~~receiving step of receiving said information regarding said sheet feeding interval~~ includes a step of receiving information regarding whether a sheet is detected on said sheet supplying device~~[[;]]~~.

wherein the transfer member includes an intermediate transfer member,

~~wherein the step of forming the image includes:~~

the method further comprising the an image transferring step of transferring a plurality of color toner images from a plurality of image-carrying members, each image-carrying member carrying one color of said plurality of color toner images, onto ~~[[an]]~~ the intermediate transfer member~~[[;]]~~.

wherein the transferring step includes transferring said plurality of color toner images from said intermediate transfer member onto a sheet~~[[;]]~~, and

Appl. No. 10/808,626
Reply to OA of 9/28/05

wherein subsequent to the receiving step of receiving the information regarding the second sheet feeding interval, said image forming step of forming the image is performed subsequent to said step of receiving said information ~~regarding detecting~~ indicating a sheet ~~loaded on~~ exists in said sheet supplying device.

11. (Currently Amended) An image formation method according to ~~any one of Claims Claim 7 through 10~~, further comprising the following steps:

a determining step of determining [[the]] a position of the sheet supplying device relative detachably mounted to the image formation apparatus; and

a transmitting step of transporting a signal to notify the sheet interval information to said sheet supplying device when determining whether that said position of the sheet supplying device is a predetermined position in the determining step, and if so, transmitting said sheet feeding interval to said sheet supplying device.

12. (Currently Amended) An image formation method according to Claim 11, wherein the ~~determining step of determining the position of the sheet supplying device~~ includes determining a detachable mounting position of the sheet supplying device to the image formation apparatus, and further including determining whether said detachable mounting position is the predetermined position, and if so, transmitting ~~said sheet feeding interval~~ the signal to said sheet supplying device.

13-21. (Canceled)

22. (New) An image formation apparatus for forming images on sheets fed from two or more sheet supplying device detachably mountable to the image formation apparatus, said image formation apparatus comprising:

a sheet transporting unit transporting said sheets fed from said sheet supplying device;
an image formation unit forming image on a transfer member;

Appl. No. 10/808,626
Reply to OA of 9/28/05

a transfer unit transferring the image on the transfer member onto a sheet;
a control unit setting a sheet transporting interval in the sheet transporting unit based on a sheet interval information according to an amount of the sheets in the sheet feeding unit; and
a determination unit for determining a position of the sheet supplying device,
wherein the control unit selects whether or not to set an image forming interval on the transfer member according to the sheet interval information and determination result of the determination unit.

23. (New) An image formation apparatus according to Claim 22, wherein the sheet interval information includes a number of sheets in the sheet supplying device.

24. (New) An image formation apparatus according to Claim 23, wherein in a case where the number of sheets in the sheet supplying device is greater than a predetermined number of sheets, the control unit receives information relating to a first sheet feeding interval, and the sheet transporting unit transports the sheets at said first sheet feeding interval; and

wherein in a case where the number of sheets in said sheet supplying device is less than or equal to said predetermined number of sheets, the control unit receives information relating to a second sheet feeding interval longer than said first sheet feeding interval, and the transporting unit transports said sheets at said second sheet feeding interval.

25. (New) An image formation apparatus according to Claim 24,
wherein the image formation unit includes a plurality of image carrying members, each image carrying member carrying one color of a plurality of color toner images,

wherein the transfer member includes an intermediate transfer member,
wherein the transfer member includes the intermediate transfer member facilitating primary image transfer by contacting said plurality of image carrying members for transferring said plurality of color toner images onto said intermediate transfer member,

wherein the transfer unit facilitates secondary image transfer by transferring said plurality of color toner images from said intermediate transfer member onto a sheet, and

wherein said control unit receives information on whether a sheet remains in said sheet supplying device, in a case where the receiving unit receives the information relating to the

Appl. No. 10/808,626
Reply to OA of 9/28/05

second sheet feeding interval, and responsive to said information on whether the sheet remains, initiates primary image transfer onto the intermediate transfer member.